

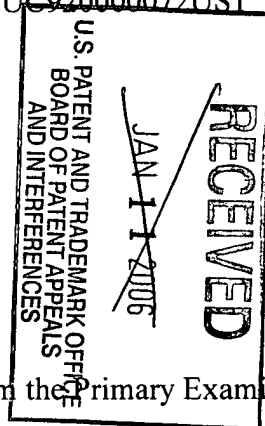


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appln. Of: DIMITRI ET AL.
Serial No.: 09/757,971
Filed: January 10, 2001
For: AUTOMATED DATA STORAGE SYSTEM . . .
Group: 3653
Examiner: Jeffrey Shapiro DOCKET: TUC920000072US1

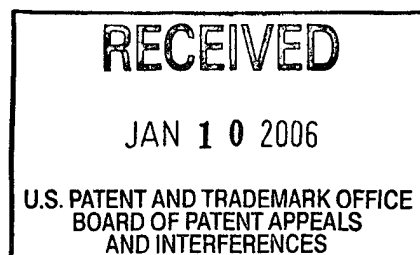
Board of Patent Appeals and Interferences
US Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:



Appellants' Brief On Appeal

This Brief is being filed in support of Appellants' Appeal from the Primary Examiner to the Board of Patent Appeals and Interferences. Appellants timely filed a Notice of Appeal and a Pre-Appeal Brief Review Request on September 8, 2005. A Notice of Panel Decision from Pre-Appeal Brief Review was mailed on November 4, 2005. Appellants are filing a Petition For A One Month Extension on even date herewith. In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account No. 502262.



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REAL PARTIES IN INTEREST

The real party in interest in this appeal is International Business Machines Corporation, a New York corporation. On or about November 30, 2000, Applicants / Appellants assigned all right, title, and interest, in and to the Application having Serial No. 09/757,971 to International Business Machines Corporation.

RELATED APPEALS AND INTERFERENCES

To the best of the knowledge of the undersigned attorney and the Appellants, no other appeals or interferences exist which will affect or be directly affected, or have a bearing on, the instant appeal.

STATUS OF CLAIMS ON APPEAL

Claims 1 through 22 stand rejected and are on Appeal. The claims on appeal are set forth in **Appendix A**.

STATUS OF THE AMENDMENTS

A Final Office Action was mailed on March 8, 2005. Appellants filed a Notice of Appeal and a Pre-Appeal Brief Review Request on September 8, 2005. A Notice of Panel Decision from Pre-Appeal Brief Review was mailed on November 4, 2005.

SUMMARY OF THE INVENTION ON APPEAL

The invention on appeal comprises an automated data storage system 10 comprising media storage library 12 and garage 14. Media storage library 12 includes a plurality of media storage slots 70 in which are stored a plurality of portable data storage media. Media storage library 12 further includes one or a plurality of data storage drives, such as drive 72, for reading and/or writing data on accessed media 74. Media storage library 12 also includes first rail

system 16. Accessor 18 is movably disposed on first rail system 16 such that accessor 18 can move bi-directionally along first rail 16. In the embodiment shown in FIG. 1, accessor 18 moves in the +/- X direction. Page 4 at Lines 9 through 16.

Garage 14 includes one or a plurality of movable rail systems. Each movable rail system of garage 14 can hold one or a plurality of accessors. In the embodiment shown in FIG. 1, rail systems 20, 22, 24, 26, and 28 are individually movable in the +/- Y direction, which is perpendicular to the +/- X direction.

ISSUES PRESENTED ON APPEAL

The issues presented on appeal are:

1. Whether claims 1-22 are unpatentable under 35 U.S.C. § 103(a) over Motoyama et al. (U.S. Pat. No. 6,022,180) in view of Kanetsuku et al (U.S. Pat. No. 6,449,223), further in view of Ostwald et al. (U.S. Pat. No. 6,262,863) and still further in view of Mobley (U.S. Pat. No. 6,123,029).

GROUPING OF CLAIMS

1. Claims 1 through 9, stand or fall as a group.
2. Claims 10 through 18 stand or fall as a group.
3. Claims 19 through 22 stand or fall as a group.

ARGUMENTS ON APPEAL

I. THE EXAMINER IMPROPERLY REJECTS CLAIMS 1 - 9 UNDER 35 USC § 103(a) AS BEING UNPATENTABLE OVER MOTOYAMA ET AL. IN VIEW OF KANETSUKU ET AL., FURTHER IN VIEW OF OSTWALD ET AL. AND STILL FURTHER IN VIEW OF MOBLEY

A. *The Examiner Improperly Combines The Teachings Of Motoyama Et Al. With The Teachings Of Ostwald*

Appellants respectfully submit that the Examiner's combination of Motoyama et al. with Ostwald et al. is improper. "The initial burden of establishing a basis for denying patentability to a claimed invention rests upon the examiner." *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984). In establishing a *prima facie* case of obviousness under 35 USC 103, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. *Ex parte Clapp*, 227 USPQ 972 (BPAI 1985).

It is well-settled that there must be some motivation to make the combination of references relied upon by the Examiner. "There is no suggestion to combine, however, if a reference teaches away from its combination with another source." *Id.* at 1599; *Tec Air Inc. v. Denso Manufacturing Michigan Inc.*, 52 USPQ2d 1294, 1298 (Fed.Cir. 1999). Ostwald et al. teach away from Motoyama et al..

Motoyama et al. teach an accessor "which is capable of surely transferring a plurality of types of cartridges (media), thus meeting a variety of needs from the users." Col. 2 / Lines 6-13. Motoyama et al's accessor includes a carriage section, a vertical pillar, and a movable servo section disposed on that vertical pillar. *See*, Motoyama et al. at FIG. 2. Similarly, Kanetsuku et al. teach use of an accessor comprising a carriage section, a vertical pillar, and a

moveable servo section. *See*, Kanetsuku et al. at FIG. 4.

Ostwald et al. teach a “library comprising a two dimensional array that contains media cartridge cells and media cartridge players. A system of rails is used to guide robotic pods through all of the locations in the array.” Col. 2 / Lines 60 - 64. Significantly, Ostwald et al. teach away from Motoyama et al. “A reference may be said to teach away when a person of ordinary skill, upon reading the reference . . . would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed.Cir. 1994). Ostwald et al. teaches away from using accessors which include a lifting servo section as recited in Motoyama et al. and in Kanetsuku et al., and in Appellants’ claims.

Ostwald et al., at Col. 2 between lines 6 and 36, recite at length certain alleged deficiencies inherent in using a movable “robotic arm” such as the vertical pillar / lifting servo section components of the accessor taught by Motoyama et al. For example, Ostwald et al. complain that “[t]he typical robotic arm and its supporting structure requires several servo motors to move the robotic arm between positions.” Col. 2 / Lines 22 - 24. Ostwald et al. further complain that “each move of the robotic arm requires a time interval after the mechanism has stopped to bring the servo position into a steady state.” Col. 2 / Line 24 - 26. Further, Ostwald et al. teach “[t]he moving mass of the robotic arm is much greater than the media cartridge being moved . . . The moving mass of the robotic arm also relates directly to power consumption, which is an important factor in large installations.” Col. 2 / Lines 29-31 and 34 - 36.

In order to eliminate a servo mechanism to move the accessor’s gripper mechanism upwardly and downwardly, Ostwald et al. teach a library wherein “[a] system of rails is used to

guide robotic pods through all of the locations in the array . . .” Col. 2 / Lines 63 - 64. Ostwald et al.’s FIG. 1 shows this “system of rails” wherein the horizontal rails 122 - 126 guide Ostwald et al.’s pods 102 horizontally. The movable vertical rail system 132 moves the pods upwardly and downwardly. Thus, Ostwald et al. teach a storage library wherein the entire accessor, rather than only one or more gripper mechanisms, is moved to each storage location and data drive.

One of ordinary skill in the art following the teachings of Ostwald et al. would be motivated to construct a storage library comprising a rail system in combination with one or more accessors, where none of those accessors comprise a vertical pillar in combination with a moveable servo section traveling upwardly and downwardly along that pillar. Rather, Ostwald et al. teach use of an accessor that can be positioned immediately in front of each storage slot and storage drive. Thus, Ostwald et al. teach away from both Motoyama et al. and Kanetsuku et al. This being the case, Appellants respectfully submit that the Examiner improperly combines the teachings of Ostwald et al. with Motoyama et al. and/or Kanetsuku et al.

B. The Examiner Improperly Combines The Teachings Of Motoyama Et Al. With The Teachings Of Mobley

Mobley teaches “an improved truck-train system for transporting both passengers and freight by railway.” Col. 1 / Lines 5-9. Appellants respectfully submit that the Examiner improperly combines the teachings of Motoyama et al. and Mobley, because Mobley does not comprise analogous art.

“In order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” MPEP 2141.01(a).

“A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor’s endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor’s attention in considering his problem.” MPEP 2141.01(a); *In re Clay*, 966 F.2d 656, 659 23 USPQ2d 1058, 1060-61 (Fed.Cir. 1992).

Mobley is clearly directed to railroad systems. Appellants’ claims are directed to an automated data storage library. The Examiner makes no showing that Mobley would have commended itself to one skilled in the art of making or using automated data storage libraries.

C. Motoyama Et Al. In Combination With Kanetsuku Et Al., Ostwald Et Al., And Mobley, Fail To Teach Or Suggest All The Elements Of Appellants’ Claim 1

Even if the combination of Motoyama et al. and Ostwald et al. were proper, those combined teachings do not teach or suggest all the elements of Appellants’ claims 1. Ostwald et al. teach a media library comprising robots which move along a rail system comprising parallel rails 121, 122, 123, 134, 125, and 126, where each of those rails runs horizontally, i.e. along a first axis, in combination with moveable rails 141A and 141B, where those moveable rails moves vertically, i.e. along a second axis. Ostwald et al. do not teach moving the moveable rails on any sort of rail system. Rather, Ostwald et al. teach use of a vertical drive motor 133 and a belt drive 143. Col. 5 / Lines 35-39. Ostwald et al. nowhere teach or suggest disposing moveable rails 140 on a rail system. This being the case, Ostwald et al. nowhere teach disposing moveable rails on a rail system comprising two parallel sets of rails, as recited in Appellants’ claim 1.

The Examiner incorrectly posits, *inter alia*, that “Ostwald appears to further read on applicant’s independent claims.” First sentence on Page 6 of the March 8, 2005 Office Action.

In the next paragraph on Page 6, the Examiner asserts that Ostwald et al. teach “a moveable rail system (140) wherein each moveable set of rails can be moved bidirectionally along a third axis, where said third axis is perpendicular to both said first axis and said second axis.” The Examiner then, however, defines that “third axis” in two different, and contradictory, ways:

Note that the **third axis is up and down** with respect to the vertical column of the [sic] and that the stationary rails (121) allow movement perpendicular to the direction in which the moveable rails move, and that **a third axis exists along which the cartridge picker moves in and out of the storage cell along another functionally equivalent movement axis.**

First full paragraph on Page 6 in the March 8, 2005 Office Action (emphasis added). Ostwald et al, nowhere teach or suggest an automated data storage system comprising a moveable set of rails disposed on a rail system comprising two parallel sets of rails.

Even if the combination of Motoyama et al. and Mobley were proper, those combined teachings do not teach or suggest teaches or suggests an automated data storage system comprising a moveable set of rails disposed on a rail system comprising two parallel sets of rails, as recited in Appellants’ claim 1.

Mobley teaches a switching ramp 75, where that switching ramp comprises a plurality of rails 35, where ramp 75 comprises concrete slab 76, and where “slab 76 is adapted for rolling movement within the pit structure 80 being mounted on a plurality of railroad bogies devices 72 or other similar devices . . .” Col. 10 / Lines 25-28. Mobley teaches a moveable set of rails, namely switching ramp 75. Mobley nowhere teaches or suggests, however, disposing that switching ramp on a rail system comprising two parallel sets of rails.

Therefore, even if Mobley did comprise analogous art, Mobley nowhere teaches or suggests a moveable set of rails disposed on a rail system comprising two parallel sets of rails.

Moreover, even if the combination of Motoyama et al., Kanetsuku et al., Ostwald et al., and Mobley were proper, those combined teachings do not teach or suggest an automated data storage system which comprises a moveable set of rails disposed on a rail system comprising two parallel sets of rails, as recited in Appellants' claim 1.

In addition, even if the combination of Motoyama et al., Kanetsuku et al., Ostwald et al., and Mobley were proper, those combined teachings do not teach or suggest an automated data storage system which comprises a first rail system comprising a set of rails disposed along a first axis; one or a plurality of accessors comprising a lifting servo section which moves bidirectionally on a pillar along a second axis, where the first axis is perpendicular to the second axis; a second rail system comprising two parallel sets of rails disposed along a third axis, where the third axis is perpendicular to both the first axis and the second axis; and a moveable set of rails that can be moved bidirectionally along the second rail system, as recited in Appellants' claim 1.

In summary, Appellants respectfully submit that the Examiner improperly combines the teachings of Motoyama et al. and Ostwald et al. In addition, the Appellants further respectfully submit that the Examiner improperly combines the teachings of Motoyama et al. and Mobley. Moreover, the Appellants further respectfully submit that even if the combination of Motoyama et al., Kanetsuku at al., Ostwald et al., and Mobley, were proper, those combined teachings fail to teach or suggest all the elements of Appellants' claim 1.

D. *Motoyama Et Al. In Combination With Kanetsuku Et Al., Ostwald Et Al., And Mobley, Fail To Teach Or Suggest All The Elements Of Appellants' Claims 2 through 9*

Claims 2 through 9, inclusive, depend, directly or indirectly, from claim 1. Under 35 U.S.C. § 112, fourth paragraph, "a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." Therefore, claims 2 through 9, inclusive include all the elements of claim 1. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." MPEP 2143.03; *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed.Cir. 1988).

For the reasons set forth above, Appellants respectfully submit that Motoyama et al. in combination with Kanetsuku et al., Ostwald et al., and Mobley, do not render obvious Appellants' claim 1. This being the case, Appellants further respectfully submit that claims 2 through 15, as amended herein, are non-obvious over Motoyama et al. in combination with Kanetsuku et al., Ostwald et al., and Mobley.

II. THE EXAMINER IMPROPERLY REJECTS CLAIMS 10 - 18 UNDER 35 USC § 103(a) AS BEING UNPATENTABLE OVER MOTOYAMA ET AL. IN VIEW OF KANETSUKU ET AL., FURTHER IN VIEW OF OSTWALD ET AL. AND STILL FURTHER IN VIEW OF MOBLEY

A. *The Examiner Improperly Combines The Teachings Of Motoyama Et Al. With The Teachings Of Ostwald, And Improperly Combines the Teachings Of Motoyama et al. and Mobley*

For the reasons set forth above, Appellants respectfully submit that the Examiner's combination of Motoyama et al. with Ostwald et al. is improper. For the reasons set forth above, Appellants respectfully submit that the Examiner's combination of Motoyama et al. with Mobley is improper.

B. Motoyama Et Al. In Combination With Kanetsuku Et Al., Ostwald Et Al., And Mobley, Fail To Teach Or Suggest All The Elements Of Appellants' Claim 10

Even if the combination of Motoyama et al. and Ostwald et al. were proper, and even if the combination of Motoyama et al. and Mobley were proper, Motoyama et al. in combination with Kanetsuku et al., Ostwald et al., and Mobley, fail to teach or suggest all the elements of Appellants' claim 10.

Appellants' claim 10, as amended herein, recites a first media storage library comprising a first rail system comprising a set of rails disposed along a first axis, a second media library comprising a second rail system comprising a second set of rails disposed along the first axis, a plurality of accessors where each accessor includes a movable servo section that can be moved bidirectionally along a second axis, where that second axis is perpendicular to the first axis, in combination with a garage comprising a third rail system comprising two parallel sets of rails, where each set of rails is disposed along a third axis where that third axis is perpendicular to both the first axis and the second axis, in combination with a movable set of rails, where that moveable set of rails can be moved bidirectionally along the third rail system to be colinear with the first rail system such one or more accessors can be moved between said first rail system and said moveable rail system, and where that moveable set of rails can be moved bidirectionally along the third rail system to be colinear with the second rail system such one or more accessors can be moved between the second rail system and the moveable rail system.

Neither Motoyama et al., nor Kanetsuku et al., nor Ostwald et al., nor Mobley, singly or in combination, suggest or teach a first media storage library comprising a first rail system comprising a set of rails disposed along a first axis, a second media library comprising a second

rail system comprising a second set of rails disposed along the first axis, a plurality of accessors where each accessor includes a movable servo section that can be moved bidirectionally along a second axis, where that second axis is perpendicular to the first axis, in combination with a garage comprising a third rail system comprising two parallel sets of rails, where each set of rails is disposed along a third axis where that third axis is perpendicular to both the first axis and the second axis, in combination with a movable set of rails, where that moveable set of rails can be moved bidirectionally along the third rail system to be colinear with the first rail system such one or more accessors can be moved between said first rail system and said moveable rail system, and where that moveable set of rails can be moved bidirectionally along the third rail system to be colinear with the second rail system such one or more accessors can be moved between the second rail system and the moveable rail system.

Therefore, Appellants respectfully submit that the Examiner incorrectly rejects Appellants' claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Motoyama et al., in combination with Kanetsuku et al., Ostwald et al., and Mobley.

C. Motoyama Et Al. In Combination With Kanetsuku Et Al., Ostwald Et Al., And Mobley, Fail To Teach Or Suggest All The Elements Of Appellants' Claims 11 through 18

Claims 11 through 18, inclusive, depend, directly or indirectly, from claim 10. Under 35 U.S.C. § 112, fourth paragraph, "a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." Therefore, claims 11 through 18, inclusive include all the elements of claim 10. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." MPEP 2143.03; *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed.Cir. 1988).

For the reasons set forth above, Appellants respectfully submit that Motoyama et al. in combination with Kanetsuku et al., Ostwald et al., and Mobley, do not render obvious Appellants' claim 10. This being the case, Appellants further respectfully submit that claims 11 through 18 are non-obvious over Motoyama et al. in combination with Kanetsuku et al., Ostwald et al., and Mobley.

III. THE EXAMINER IMPROPERLY REJECTS CLAIMS 19-22 UNDER 35 USC § 103(a) AS BEING UNPATENTABLE OVER MOTOYAMA ET AL. IN VIEW OF KANETSUKU ET AL., FURTHER IN VIEW OF OSTWALD ET AL. AND STILL FURTHER IN VIEW OF MOBLEY

A. *The Examiner Improperly Combines The Teachings Of Motoyama Et Al. With The Teachings Of Ostwald, And Improperly Combines the Teachings Of Motoyama et al. and Mobley*

For the reasons set forth above, Appellants respectfully submit that the Examiner's combination of Motoyama et al. with Ostwald et al. is improper. For the reasons set forth above, Appellants respectfully submit that the Examiner's combination of Motoyama et al. with Mobley is improper.

B. *Motoyama Et Al. In Combination With Kanetsuku Et Al., Ostwald Et Al., And Mobley, Fail To Teach Or Suggest All The Elements Of Appellants' Claim 19*

Even if the combination of Motoyama et al. and Ostwald et al. were proper, and even if the combination of Motoyama et al. and Mobley were proper, Motoyama et al. in combination with Kanetsuku et al., Ostwald et al., and Mobley, fail to teach or suggest all the elements of Appellants' claim 19. Appellants' claim 19 recites a method of moving one or more accessors between a first media storage library, comprising a first rail system comprising a set of rails disposed along a first axis, and a second media library, comprising a second rail system comprising a set of rails disposed along the first axis, through a garage comprising a third rail

system disposed along a third axis perpendicular to the first axis and a moveable set of rails that can be moved bidirectionally along that third rail system.

Claim 19 further recites that each accessor includes a movable servo section that can be moved bidirectionally along a second axis, where that second axis is perpendicular to the first axis. Claim 19 further recites positioning a moveable set of rails on the third rail system to be colinear with the first rail system and moving one or more accessors from the first rail system onto that moveable set of rails. Claim 19 further recites positioning the moveable set of rails to be colinear with the second rail system and moving one or more accessors from the moveable set of rails onto the second rail system.

Neither Motoyama et al., nor Kanetsuku et al., nor Ostwald et al, nor Mobley, singly or in combination, suggest or teach a method to move an accessor within an automated data storage system comprising a first media storage library comprising a first rail system, a second media storage library comprising a second rail system, and a garage comprising a third rail system in combination with a moveable set of rails that can move bidirectionally along the third rail system. Moreover, Neither Motoyama et al., nor Kanetsuku et al., nor Ostwald et al, nor Mobley, singly or in combination, suggest or teach positioning the moveable set of rails to be colinear with the first rail system, moving one or more accessors from the first rail system onto a moveable set of rails, positioning the moveable set of rails to be colinear with the second rail system, and moving one or more accessors from the moveable set of rails onto the second rail system.

Therefore, Appellants respectfully submit that the Examiner incorrectly rejects Appellants' claim 19 under 35 U.S.C. § 103(a) as being unpatentable over Motoyama et al., in

combination with Kanetsuku et al., Ostwald et al., and Mobley.

C. *Motoyama Et Al. In Combination With Kanetsuku Et Al., Ostwald Et Al., And Mobley, Fail To Teach Or Suggest All The Elements Of Appellants' Claims 20 through 22*

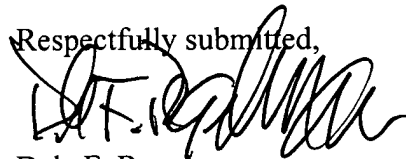
Claims 20 through 22, inclusive, depend, directly or indirectly, from claim 19. Under 35 U.S.C. § 112, fourth paragraph, "a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." Therefore, claims 20 through 22, inclusive include all the elements of claim 19. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." MPEP 2143.03; *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed.Cir. 1988).

For the reasons set forth above, Appellants respectfully submit that Motoyama et al. in combination with Kanetsuku et al., Ostwald et al., and Mobley, do not render obvious Appellants' claim 19. This being the case, Appellants further respectfully submit that claims 20 through 22 are non-obvious over Motoyama et al. in combination with Kanetsuku et al., Ostwald et al., and Mobley.

CONCLUSION

In view of the foregoing, Appellants respectfully request that the Examiner's rejection of the subject application be reversed in all respects.

Respectfully submitted,



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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Board of Patent Appeals and Interference, US Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, on January 9, 2006, at Tucson, Arizona.

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APPENDIX A

1. An automated data storage system, comprising:

a first media storage library having a first rail system comprising a set of rails disposed therein along a first axis;

a garage disposed adjacent said first media storage library, said garage having a movable rail system disposed therein;

one or a plurality of accessors, wherein said one or a plurality of accessors can be moved bidirectionally along said first rail system, and wherein each accessor comprises a running section, a vertical pillar extending outwardly from said running section, a lifting servo section which can be moved bidirectionally on said vertical pillar along a second axis, two robotic manipulators disposed on said lifting servo section, and a scanner disposed on said lifting servo section, wherein said second axis is perpendicular to said first axis;

wherein said garage comprises:

a second rail system comprising two parallel sets of rails, wherein each set of rails is disposed along a third axis, wherein that third axis is perpendicular to both said first axis and said second axis;

a movable set of rails, wherein said movable set of rails can be moved bidirectionally along said second rail system to be substantially colinear with said first rail system such one or more accessors can be moved between said first rail system and said moveable rail system.

2. The automated data storage system of claim 1, wherein said first rail system further comprises a proximal end and a distal end, and wherein said movable rail system further comprises a first end and a second end, and wherein said first end can be

positioned to be substantially colinear with said proximal end such that said one or plurality of accessors can move between said first rail system and said movable rail system.

3. The automated data storage system of claim 2, wherein said movable rail system further comprises a first positioning apparatus disposed on said first end and a second positioning apparatus disposed on said second end.

4. The automated data storage system of claim 1, wherein said movable rail system comprises two parallel rails.

5. The automated data storage system of claim 1, wherein said movable rail system comprises a plurality of paired parallel rails, wherein each of said plurality of paired parallel rails has a first end and a second end.

6. The automated data storage system of claim 5, wherein each of said pairs of parallel rails further comprises a first positioning apparatus disposed on its first end and a second positioning apparatus disposed on its second end.

7. The automated data storage system of claim 1, wherein said garage further comprises one or a plurality of doors.

8. The automated data storage system of claim 1, wherein said first rail system comprises two parallel rails.

9. The automated data storage system of claim 1, further comprising one or a plurality of movable media storage devices.

10. An automated data storage system, comprising:
a first media storage library having a first rail system comprising a set of rails disposed therein along a first axis;

a second media storage library having a second rail system comprising a set of rails disposed therein along said first axis;

one or a plurality of accessors, wherein each accessor comprises a running section, a vertical pillar extending outwardly from said running section, a lifting servo section which can be moved on said vertical pillar along a second axis, two robotic manipulators disposed on said lifting servo section, and a scanner disposed on said lifting servo section, wherein said second axis is perpendicular to said first axis;

a garage having a movable rail system disposed therein, wherein said garage is disposed adjacent said first media storage library and adjacent said second media storage library;

wherein said garage comprises:

a third rail system comprising two parallel sets of rails, wherein each set of parallel rails is disposed along a third axis, wherein said third axis is perpendicular to both said first axis and said second axis;

a movable sets of rails, wherein said movable set of rails can be moved bidirectionally along said third rail system to be substantially colinear with said first rail system such one or more accessors can be moved between said first rail system and said moveable rail system, and wherein said moveable set of rails can be moved bidirectionally along said third rail system to be to be substantially colinear with said second rail system such one or more accessors can be moved between said second rail system and said moveable rail system.

11. The automated data storage system of claim 10, wherein said movable rail system can be positioned such that said one or a plurality of accessors can move between

said first rail system and said movable rail system and between said second rail system and said movable rail system.

12. The automated data storage system of claim 10, wherein said movable rail system further comprises a first positioning apparatus disposed on said first end and a second positioning apparatus disposed on said second end.

13. The automated data storage system of claim 10, wherein said movable rail system comprises two parallel rails.

14. The automated data storage system of claim 10, wherein said movable rail system comprises a plurality of paired parallel rails, wherein each of said plurality of paired parallel rails has a first end and a second end.

15. The automated data storage system of claim 14, wherein each of said pairs of parallel rails further comprises a first positioning apparatus disposed on its first end and a second positioning apparatus disposed on its second end.

16. The automated data storage system of claim 10, wherein said garage further comprises one or a plurality of doors.

17. The automated data storage system of claim 10, wherein said first rail system and said second rail system each comprise two parallel rails.

18. The automated data storage system of claim 10, further comprising one or a plurality of movable media storage devices.

19. A method of moving one or a plurality of accessors within an automated data storage system, said method comprising the steps of:

providing a first media storage library having a first rail system comprising a set of rails disposed therein along a first axis;

providing a second media storage library having a second rail system comprising a set of rails disposed therein along said second axis;

providing one or a plurality of accessors, wherein said one or a plurality of accessors each comprise a running section, a vertical pillar extending outwardly from said running section, a lifting servo section which can be moved along a second axis on said vertical pillar, two robotic manipulators disposed on said lifting servo section, and a scanner disposed on said lifting servo section, wherein said second axis is perpendicular to said first axis;

providing a garage having a movable rail system disposed therein, wherein said garage is disposed adjacent said first media storage library and adjacent said second media storage library, wherein said garage comprises:

a third rail system comprising two parallel set of rails, wherein each set of rails is disposed along a third axis, wherein said third axis is perpendicular to both said first axis and said second axis;

a plurality of movable sets of rails, wherein each movable set of rails can be moved bidirectionally along said third rail system;

movably disposing said one or a plurality of accessors on said first rail system;

positioning one of said moveable sets of rails to be substantially colinear with said first rail system;

moving said one or a plurality of accessors from said first rail system onto said movable set of rails;

positioning said movable set of rails to be substantially colinear with said second rail system;

moving said one or a plurality of accessors from said movable set of rails onto said second rail system.

20. The method of claim 19, further comprising the steps of:

positioning said movable rail system to be substantially colinear with both said first rail system and said second rail system; and

moving said one or a plurality of accessors from said first rail system onto said movable rail system and then from said movable rail system onto said second rail system.

21. The method of claim 20, wherein said movable rail system has a first end and a second end, and wherein said movable rail system further comprises a first positioning device disposed on said first end and a second positioning device on said second end.

22. The method of claim 20, wherein said movable rail system comprises a plurality of paired parallel rails, wherein each of said plurality of paired parallel rails has a first end and a second end; and wherein each of said pairs of parallel rails further comprises a first positioning apparatus disposed on the first end and a second positioning apparatus disposed on the second end.